REMARKS

Reconsideration and continuing examination of the above-identified application is respectfully requested in view of the amendments above and the discussion that follows. It is also respectfully requested that the above amendments be entered.

Claim 33 has been amended and the Title and Abstract have been rewritten as are discussed below. Claims 33-37 are in the case and are before the examiner.

A. The Amendments

1. Title

In accordance with the Action dated September 18, 2006, the title has been replaced pursuant to the Examiner's helpful suggestion.

2. Abstract

In accordance with the Action dated September 18, 2006, the Abstract has been replaced pursuant to the Examiner's helpful suggestion.

3. Claims

Claim 33 has been amended to replace "nucleic acid" with "DNA" to improve syntax.

Claim 33 has also been amended to recite that "the first double stranded DNA has a region of partial homology or non-homology with a second double stranded DNA." Support for this amendment is found in the specification at least on page 13 in the third full

paragraph where the description of the instant method provides that there are "regions of non- or partial homology" between the first and the second double stranded DNAs. Further support is found on page 12 in the fourth full paragraph where the specification provides that the DNAs useful for making the libraries have "different DNA sequences".

Claim 33 has also been amended to recite that the second double stranded DNA is added to the pretreated single stranded regions "in the presence of the recombination factor." Support for this is found at least on page 13, where the specification discloses that the three stranded crossover reaction can occur in the presence of a recombination factor.

Claim 33 has also been amended to recite that the result of the claimed method is a library of DNA sequences. Support for this amendment is found in the preamble of claim 33, as well as in the specification on page 12, in the section title referring to the method to "create libraries."

It is thus seen that no new matter has been added.

B. The Action

1. Rejection pursuant to 35 U.S.C. §112, Second Paragraph

The Action requested clarification regarding the relationship of the term library of the preamble to the method steps of claim 33, how a plurality of three stranded crossover junctions are formed, and whether junctions have

homology to the second DNA. Claim 33 has been amended as described above. It is thus believed that the amendments address the issues raised and has made them moot. The amendments clarify the Action's issues of homology, how the three stranded junction is formed, and that the result of the method steps is a library of DNA sequences.

2. Rejection pursuant to 35 U.S.C. §102

The Action rejected the instant claims over the disclosures of Mosig (1998), Kowalczykowski (1994), and West (1992). (Action, pp. 4-6) It is respectfully submitted that none of the above teachings disclose any single method, chain of events or recombination pathway having all of the elements of claim 33. This basis for rejection is therefore respectfully traversed.

For example, Mosig (1998) describes several recombination pathways found in the replication of phage T4. None of these pathways disclose or even suggest "incubating a first double-stranded DNA with an enzyme with exonuclease activity to form a plurality of single stranded DNA regions having random sizes" as required by claim 33, part (a). Rather, partial digestion of a double stranded DNA molecule is shown in Figure 2 (relied upon by the Action, at page 4), but this results neither in a plurality of single stranded DNA regions nor a plurality of regions having random sizes as were and are recited in the claim.

Attention is further drawn to Figure 5, as relied on by the Action (page 4) and plain distinctions between them and the instant invention. Although these are not the only differences, pathways I-III (Fig. 5a-c) are clearly "used in strictly homologous T4 recombination," (Mosig, pages 394-395) and so do lack single stranded regions

having a region of non-homology or partial homology. Pathway IV (Fig. 5d) repairs double stranded breaks and does not involve incubation with a second DNA. Pathway V (Fig. 5e) shows a replication-dependant pathway requiring DNA synthesis but without a helicase or an endonuclease to form or resolve Holliday junctions (claim 33, steps d-e). Thus it is seen that Mosig (1998) does not anticipate the instant invention.

As noted above, claim 33 has been amended to provide that the first double stranded DNA and at least one pretreated single stranded region have a region of non-homology or partial homology to the second double stranded DNA. Kowalczykowski (1994) does not teach such limitation, among others. Rather, it clearly describes homologous recombination, as described in the title of the document, "In vitro reconstitution of homologous recombination." Thus it is seen that Kowalczykowski (1994) does not anticipate the instant invention.

West (1992) is also said by the Action to anticipate the instant invention. (Action, pages 5-6) The Action relies on the disclosure of page 622, 2nd paragraph, which says that "[t]he purified SepI protein contains an intrinsic exonuclease activity that degrades single-stranded and double-stranded DNA in a 5'...,.3' direction" as anticipating step (a) of claim 33. (Action, page 5) However as with, Mosig, *supra*, West does not disclose or even suggest formation of "a plurality of single stranded DNA regions having random sizes" recited by claim 33, part (a). Thus, it is seen that West does not anticipate the instant invention.

Furthermore, common to all of the relied-on disclosures is that nowhere is the method as a whole

taught. Even assuming, *arguendo* (and it is not conceded) that each element might be found in any of these papers, they are never put together as a single method that creates libraries. Rather individual activities, particular enzymes, and even proposed pathways of homologous recombination are disclosed, none of which constitute the method as a whole. As such, there can be no anticipation of the claimed subject matter, and this basis for rejection should be withdrawn.

C. Summary

Claim 33 has been amended as suggested in the Action, and the Title and Abstract have been replaced as also suggested in the Action. Each basis for rejection or objection has been dealt with and overcome or otherwise made moot.

It is therefore believed that this application is in condition for allowance of all of the claims. An early notice to that effect is earnestly solicited.

No further fee or petition is believed to be necessary. However, should any further fee be needed, please charge our Deposit Account No. 23-0920, and deem this paper to be the required petition.

The Examiner is requested to phone the undersigned should any questions arise that can be dealt with over the phone to expedite this prosecution.